Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A method of calibrating video, comprising:

calibrating at least one of pixel offset and pixel gain of a video signal via digital hardware;

calibrating for pixel gain by covering a video channel with an automatic gain control tab; and

calibrating for pixel gain by multiplying a video signal output from an integrator with a video signal inputted to a video channel other than the video channel covered with the automatic gain control tab.

2.   (Original) The method according to claim 1, further including calibrating for pixel offset by setting a range for pixel offset calibration, adjusting an uncalibrated video signal to be within the range, and providing an offset level setpoint.

3.   (Original) The method according to claim 2, further including calibrating for pixel offset by subtracting a current state of offset of a video signal from the offset level setpoint to provide an error value.

4.   (Original) The method according to claim 3, further including calibrating for pixel offset by applying a variable gain factor to the error value to provide a variable gain/error value.

5.   (Original) The method according to claim 4, wherein the variable gain factor is fixed for different trip points.

6.   (Original) The method according to claim 4, further including calibrating for pixel offset by adding the variable gain/error value to a pixel offset value stored in a storage device to provide a specified pixel offset value.

7.   (Original) The method according to claim 6, further including calibrating for pixel offset by dividing the specified pixel offset value by 16.

8.   (Original) The method according to claim 7, further including calibrating for pixel offset by adding the divided value to the video signal adjusted to be within the range.

9.   (Original) The method according to claim 1, further including calibrating for pixel gain by setting a range for pixel gain calibration, adjusting an uncalibrated video signal to be within the range, and providing for continuing compensation of changes in video intensity.

10.   (Canceled)

11.   (Currently Amended) The method according to claim ~~10~~9, further including calibrating for pixel gain by subtracting a current state of gain of a video signal from an automatic gain control tab setpoint to provide an error value.

12.   (Currently Amended) The method according to claim 11, further including calibrating for pixel gain by inputting the error value into ~~an~~ the integrator to apply the error value to a video signal over a period of time.

13.   (Currently Amended) The method according to claim 12, further including calibrating for pixel gain by multiplying ~~a~~ the video signal output from the integrator with a video signal inputted to the video channel covered with the automatic gain control tab.

14.   (Canceled)

15.   (Currently Amended) The method according to claim ~~14~~1, further including calibrating for pixel gain by subtracting a current state of gain of a video signal from a white level setpoint to provide an error value.

16.   (Original) The method according to claim 15, further including calibrating for pixel gain by applying a variable gain factor to the error value to provide a variable gain/error value.

17.   (Original) The method according to claim 16, wherein the variable gain factor is fixed for different trip points.

18.   (Original) The method according to claim 16, further including calibrating for pixel gain by adding the variable gain/error value to a pixel gain value stored in a storage device, to provide a specified pixel gain value.

19.   (Original) The method according to claim 18, further including calibrating for pixel gain by dividing the specified pixel gain value by 16.

20.   (Original) The method according to claim 19, further including calibrating for pixel gain by multiplying the divided value to the video signal adjusted to be within the range.

21.   (Currently Amended) An image sensor for use with a document scanner, comprising:

digital hardware that calibrates at least one of pixel offset and pixel gain of a video signal;

an automatic gain control tab that covers a video channel; and

an integrator, wherein pixel gain is calibrated for by multiplying a video signal output from the integrator with a video signal inputted to a video channel other than the video channel covered with the automatic gain control tab.

22.   (Original) The image sensor according to claim 21, further including a device that calibrates for pixel offset by setting a range for pixel offset calibration, adjusting an uncalibrated video signal to be within the range, and providing an offset level setpoint.

23.   (Original) The sensor according to claim 21, further including a device that calibrates for pixel gain by setting a range for pixel gain calibration, adjusting an uncalibrated video signal to be within the range, and providing for continuing compensation of changes in video intensity.